



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,613	03/25/2004	Shinroku Maejima	50099-253	5019

7590 01/26/2006

MCDERMOTT, WILL & EMERY
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

NGUYEN, DANG T

ART UNIT	PAPER NUMBER
----------	--------------

2824

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

AL

Office Action Summary	Application No. 10/808,613	Applicant(s) MAEJIMA ET AL.	
	Examiner Dang T. Nguyen	Art Unit 2824	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 6-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/30/04</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Search history</u> . |

DETAILED ACTION

1. This action is responsive to communications: Application filed on March 25, 2004 and the Information Disclosure Statement filed on July 20, 2004.
2. In response to Examiner's Requirement of Election /Restriction dated 12/01/2005, Applicant elected Group I (claims 1-5) for continued examination.
3. Claims 1 - 11 are restricted in this application. Claims 1 - 5 have been elected. Claims 6 - 11 have been non-elected. Claim 1 is independent claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Ounadjela et al., Patent No. US 6,798,691 B1 – filed Jun. 28, 2002.

Regarding independent claim 1, Fig. 4 of Ounadjela discloses a magnetic layer showing an S-shaped [42b] magnetization distribution when a strength of a magnetic field applied to said magnetic layer (Col. 19 lines 60-64) along a hard axis of said magnetic layer is higher than a threshold value (Col. 18 line 40 – Col.19 line 17) (*Fig. 42b discloses when a strength of magnetic field applied more current I_{dl} along a hard*

axis to the selected level then it transverse magnetic field in the S-shaped, inherent the magnetic layer is higher than threshold voltage then the switching state occurs) and showing a C-shaped [40b] magnetization distribution when said strength of said magnetic field applied to said magnetic layer (Col. 19 line 45 – Col. 20 line 5) along said hard axis is lower than said threshold value (Col. 18 line 25 – Col. 20 line 5, for disclosing if a strength of magnetic field current applied lower current or no external magnetic fields are applied along a hard axis then a magnetization in the C-state).

Regarding dependent claim 2, Fig. 4 of Ounadjela discloses wherein a configuration of said magnetic layer is symmetrical with respect to an axis parallel to said hard axis (Col. 24 lines 1-3) and asymmetrical with respect to an easy axis of said magnetic layer (Col. 13 lines 1-20).

Regarding dependent claim 3, Ounadjela discloses wherein said configuration of said magnetic layer includes a rounded corner (see Figs. 3 and 4).

Regarding dependent claims 4 and 5, Ounadjela discloses wherein said configuration of said magnetic layer includes a plurality of straight lines situated in one of opposite sides of hard axis (see Figs. 3 and 4).

Prior art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Katti	Patent No. US 6,798,690 B1	Date of Patent: Sep. 28, 2004
Shi et al.	Patent No. 5,757,695	Date of Patent: May 26, 1998

Contact Information

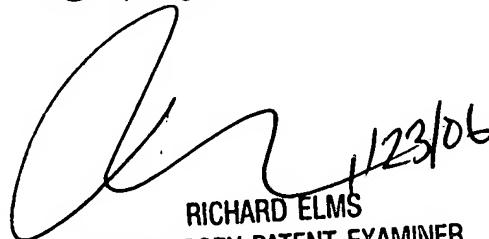
6. Any inquiry concerning this communication from the examiner should be directed to Dang Nguyen, who can be reached by telephone at (571) 272-1955. Normal contact times are M-F, 8:00 AM - 4:30 PM.

Upon an unsuccessful attempt to contact the examiner, the examiner's supervisor, Richard Elms, may be reached at (571) 272-1869.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, whose telephone number is (703) 305-3900. The faxed phone number for organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the Status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC@uspto.gov.

Dang Nguyen 1/12/2006


RICHARD ELMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800